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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/747,296

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Tal I. Lavian

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EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/747,296

Applicant(s)

LAVIAN ET AL.

Examiner

Andrew C Lee

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because numbers, letters, reference characters and legends for Figs 1 to 6 are difficult to read clearly. Numbers, letters, and reference characters must measure at least 0.32 cm (1/8 inch) in height. They should not be placed in the drawing so as to interfere with its comprehension. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The disclosure is objected to because of the following informalities:
- Pages 1 to 28, line numbering should be incorporated in each page, or the paragraphs of the specification should be individually and consecutively numbered using Arabic numerals, so as to unambiguously identify each paragraph. The number should consist of at least four numerals enclosed in square brackets, including leading zeros (e.g. [0001]).
  - Page 1, the Applicants' names should be deleted.
  - Page 5, line 13, "0baseT transmission lines" should be corrected as "10baseT transmission lines"; and line 14 "00baseF transmission lines" should be corrected as "100baseF transmission lines".
  - Claims 1, 13 and 20, " a queue having a first priority" and " a queue having a second priority" should be corrected as " priority queue" and " best effort queue" so as to be consistent with the subject matters disclosed in the specification.
  - For Fig. 4, the Office would request the applicant to clarify the nature of IP flow for block 125 in "No" condition.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 recites the limitation "a queue having a first priority to a queue having a second priority" in page 23, line 10; Claim 13 recites the limitation "a queue having a first priority to a queue having a second priority" in page 25, lines 8 – 9; Claim 20 recites the limitation "a queue having a first priority to a queue having a second priority" in page 26, lines 8 – 9. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 14 – 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 provides for the use of environmental conditions of claim 13 --, where the claim recites " a method wherein the environmental conditions meeting the predetermined criteria include time of day.", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 15 provides for the use of environmental conditions of claim 13 --, where the claim recites " a method wherein the environmental conditions meeting the predetermined criteria include network configuration changes", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 16 provides for the use of network configuration changes of claim 15 --, where the claim recites "wherein the network configuration changes include network failures.", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 17 provides for the use of network configuration changes of claim 15 --, where the claim recites "wherein the network configuration changes include network congestion.", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 18 provides for the use of environmental conditions of claim 13 --, where the claim recites " a method wherein the environmental conditions meeting the predetermined criteria include network error rates", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 19 provides for the use of environmental conditions of claim 13 --, where the claim recites " a method wherein the environmental conditions meeting the predetermined criteria include line use of high level protocols", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

### ***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 14 – 19 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under

35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1, 2, 6, 13, 15, 19, 20, 21, 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Hebb et al. (U.S. Patent No. 6463067 B1).

Regarding Claims 1, 13 and 20, Hebb et al. discloses a packet forwarding device (Abstract, lines 1 – 6, 9 – 12) comprising: monitoring types of packet traffic received in the packet forwarding device (Abstract, lines 6 – 9; column 1, lines 49 – 51); determining whether a type of packet traffic received in the packet forwarding device is a predetermined type (Abstract, lines 12 – 14); and when the type of packet traffic is the predetermined type, automatically performing at least one of changing assignment of the predetermined type of packet traffic from a queue having a first priority to a queue having a second priority (column 4, lines 25 – 30), dropping packets of the



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predetermined type in the packet traffic (column 1, lines 56 – 61), copying packets of the predetermined type in the packet traffic (column 4, lines 50 – 56), and diverting packets of the predetermined type in the packet traffic (Fig. 5, column 8, lines 28 – 38).

Regarding Claims 2 and 21, Hebb et al. discloses the limitation of packet traffic is based on its source (column 1, lines 56 – 64).

Regarding Claims 6 and 22, Hebb et al. discloses the limitation of packet traffic is based on its destination (column 1, lines 31 – 34).

Regarding Claim 15, Hebb et al. discloses the limitation of the environmental conditions meeting the predetermined criteria including network configuration changes (column 3, lines 27 – 28).

Regarding Claim 19). Hebb et al. discloses the limitation of the environmental conditions meeting the predetermined criteria including line use of high level protocols (column 3, lines 57 – 58).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3, 4, 5, 7, 8, 9, 10, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hebb et al. (U.S. Patent No. 6463067 B1) in view of Edsall et al. (U.S. Patent No. 6735198 B1).

Regarding Claims 3 and 23, Hebb et al. discloses the limitation of packet traffic is based on its source (column 1, lines 56 – 64). He fails to disclose sources of packet traffic including a source MAC address. Edsall et al. discloses the limitation of sources of packet traffic including a source MAC address (column 3, lines 21 – 24). It would have been obvious to modify Hebb et al. to include sources of packet traffic including a source MAC address such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

Regarding Claim 4, Hebb et al. discloses the limitation of packet traffic is based on its source (column 1, lines 56 – 64). He fails to disclose sources of packet traffic including a source VLAN. Edsall et al. discloses the limitation of sources of packet traffic including a source VLAN (Fig. 4, column 4, lines 55 – 59; column 6, lines 47 – 50). It

would have been obvious to modify Hebb et al. to include sources of packet traffic including a source VLAN such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

Regarding Claim 5, Hebb et al. discloses a packet forwarding device (Abstract, lines 1 – 6, 9 – 12). He fails to disclose packet traffic is based on its ingress port. Edsall et al. discloses the limitation of packet traffic is based on its ingress port (column 6, lines 11 – 18). It would have been obvious to modify Hebb et al. to include packet traffic is based on its ingress port such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

Regarding Claim 7, Hebb et al. discloses the limitation of packet traffic is based on its destination (column 1, lines 31 – 34). He fails to disclose the destination of packet traffic including a destination MAC address. Edsall et al. discloses the limitation of the destination of packet traffic including a destination MAC address (column 3, lines 10 – 12). It would have been obvious to modify Hebb et al. to include the destination of packet traffic including a destination MAC address such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

Regarding Claim 8, Hebb et al. discloses the limitation of packet traffic is based on its destination (column 1, lines 31 – 34). He fails to disclose the destination of packet traffic includes a destination VLAN. Edsall et al. discloses the limitation of the destination of packet traffic includes a destination VLAN (Fig. 4, column 4, lines 55 – 59; column 6, lines 47 – 50). It would have been obvious to modify Hebb et al. to include the destination of packet traffic includes a destination VLAN such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

Regarding Claim 9, Hebb et al. discloses a packet forwarding device (Abstract, lines 1 – 6, 9 – 12). He fails to disclose packet traffic is based on its egress port. Edsall et al. discloses the limitation of packet traffic is based on its egress port (column 6, lines 19 – 21). It would have been obvious to modify Hebb et al. to include packet traffic is based on its egress port such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

Regarding Claim 10, Hebb et al. discloses a packet forwarding device (Abstract, lines 1 – 6, 9 – 12). He fails to disclose traffic is based on its protocol. Edsall et al. discloses the limitation of traffic is based on its protocol (column 4, lines 66 – 67). It would have been obvious to modify Hebb et al. to include traffic is based on its protocol

such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

Regarding Claim 24, Hebb et al. discloses a packet forwarding device (Abstract, lines 1 – 6, 9 – 12). He fails to disclose at least some of the traffic patterns are based on specified IP flows. Edsall et al. discloses the limitation of at least some of the traffic patterns are based on specified IP flows (column 2, lines 42 – 46). It would have been obvious to modify Hebb et al. to include at least some of the traffic patterns are based on specified IP flows such as that taught by Edsall et al. in order to have a distributed forwarding mechanism architecture for updating and synchronizing forwarding tables within the switch.

13. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hebb et al. (U.S. Patent No. 6463067 B1) and Edsall et al. (U.S. Patent No. 6735198 B1) as applied to claims 3, 4, 5, 6, 7, 8, 9, 10 and 24 above, and further in view of Aho (U.S. Patent No. 6185215 B1).

Regarding Claim 11, Hebb et al. and Edsall et al. both fail to disclose explicitly the protocol of traffic includes FTP. Aho discloses the limitation of the protocol of traffic including FTP (column 5, lines 55 – 58). It would have been obvious to modify the combination teachings of Hebb et al. and Edsall et al. to include the protocol of traffic

including FTP such as that taught by Aho in order to support various protocols in LAN and WAN environment or some other type network environment.

Regarding Claim 12, Hebb et al. and Edsall et al. both fail to disclose explicitly the protocol of traffic including HTTP. Aho discloses the limitation of the protocol of traffic including HTTP (column 5, lines 55 – 60). It would have been obvious to modify the combination teachings of Hebb et al. and Edsall et al. to include the protocol of traffic including HTTP such as that taught by Aho in order to support various protocols in LAN and WAN environment or some other type network environment.

14. Claims 14, 16, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hebb et al. (U.S. Patent No. 6463067 B1) and Edsall et al. (U.S. Patent No. 6735198 B1) and Aho (U.S. Patent No. 6185215 B1) as applied to claims 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 24 above, and further in view of Brinnand et al. (U.S. Patent No. 6430616 B1).

Regarding Claim 14, Hebb et al., Edsall et al. and Aho all fail to disclose the environmental conditions meeting the predetermined criteria include time of day. Brinnand et al. discloses the limitation of the environmental conditions meeting the predetermined criteria include time of day (Fig. 2, column 4, line 8). It would have been obvious to modify the combination teachings of Hebb et al., Edsall et al. and Aho to include environmental conditions meeting the predetermined criteria include time of day such as that taught by Brinnand et al. in order to facilitate the efficient logging of

management information including information regarding events which occur in the network.

Regarding Claim 16, Hebb et al., Edsall et al. and Aho all fail to disclose the network configuration changes including network failures. Brinnand et al. discloses the limitation of the network configuration changes including network failures (Fig. 2, column 4, line 2 ). It would have been obvious to modify the combination teachings of Hebb et al., Edsall et al. and Aho to include the network configuration changes including network failures such as that taught by Brinnand et al. in order to facilitate the efficient logging of management information including information regarding events which occur in the network.

Regarding Claim 17). Hebb et al., Edsall et al. and Aho all fail to disclose the network configuration changes including network congestion. Brinnand et al. discloses the limitation of the network configuration changes including network congestion. (Fig. 2, column 4, line 7). It would have been obvious to modify the combination teachings of Hebb et al., Edsall et al. and Aho to include the network configuration changes including network congestion such as that taught by Brinnand et al. in order to facilitate the efficient logging of management information including information regarding events which occur in the network.

Regarding Claim 18, Hebb et al., Edsall et al. and Aho all fail to disclose the network configuration changes including network error rates. Brinnand et al. discloses the limitation of the network configuration changes including network error rates. (Fig. 2, column 4, line 9). It would have been obvious to modify the combination teachings of Hebb et al., Edsall et al. and Aho to include the network configuration changes including network error rates such as that taught by Brinnand et al. in order to facilitate the efficient logging of management information including information regarding events which occur in the network.

### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C Lee whose telephone number is (703) 305-8086. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL 09 September 2004

  
Ajit Patel  
Primary Examiner

<b>Notice of References Cited</b>	Application/Control No. 09/747,296	Applicant(s)/Patent Under Reexamination LAVIAN ET AL.	
	Examiner Andrew C Lee	Art Unit 2664	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,463,067 B1	10-2002	Hebb et al.	370/413
	B	US-6,735,198 B1	05-2004	Edsall et al.	370/389
	C	US-6,185,215 B1	02-2001	Aho, Michael E.	370/402
	D	US-6,788,681 B1	09-2004	Hurren et al.	370/389
	E	US-6,405,258 B1	06-2002	Erimli et al.	709/235
	F	US-6,778,525 B1	08-2004	Baum et al.	370/351
	G	US-6,430,616 B1	08-2002	Brinnand et al.	709/224
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
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	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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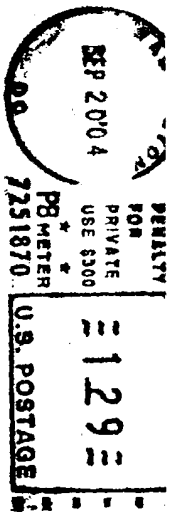
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